

STRUCTURE 38

This structure is a double-barreled corrugated metal pipe culvert, located in L-36, in the southeast corner of Conservation Area 2A, about 15 miles northwest of Fort Lauderdale. Control is effected by two manually operated sluice gates mounted on a reinforced concrete head structure.

PURPOSE

This structure permits release of water from Conservation Area 2A to supply water needs in the area served by Canals 13 and 14 during the dry season. It also can be used to discharge excess water from Conservation Area 2A when capacity is available in Canals 13 and 14 and when the water is not needed in Conservation Area 3.

OPERATION

This structure is manually operated under either flood or normal conditions.

Flood Conditions

The gates of this structure are opened whenever:

1. Excess storage is present in the Conservation Area 2A prior to hurricane season. That is when the stage in Conservation Area 2A is in Area A on the Regulation Schedule.
2. The excess water in Conservation Area 2A is not needed in Conservation Area 3.
3. The tailwater elevation will not exceed 8.2 feet.

Normal Conditions

When operations are not required under Flood Conditions, releases shall be made, as necessary, to supply downstream water requirements so as to maintain an optimum stage at S-37A, S-37B, and S-36, as water is available.

DISCHARGE CHARACTERISTICS

	Normal Conditions	Flood Conditions
Discharge Rate	<u>500</u> cfs * <u> </u> % of SPF	<u>600</u> cfs * <u> </u> % of SPF
Headwater Elevation	<u>9.8</u> feet	<u>12.2</u> feet
Tailwater Elevation	<u>7.0</u> feet	<u>8.2</u> feet
Type Discharge	uncontrolled	uncontrolled

submerged

submerged

*Designed for Normal Conditions. Discharge of Conservation Area 2 for Standard Project Flood designed to be passed through S-11 alone.

DESCRIPTION OF STRUCTURE

Type Corrugated metal culverts with upstream control

Number of Barrels 2

Size of Barrels 72 inches

Length of Barrels 52 + feet each

Flow Line Elevation 3.0 to 2.0 feet

Service Bridge Elevation 19.0 feet

Gates

Number 2

Type Hardisty Model 30-05C

Size 72 inch diameter

Control Manual with gear reduced electric motor with clutch

Lifting Mechanism

Type hoist Manual with gear reduced electric motor with clutch

Normal Power - Commercial electric power

Emergency Power - LP gas backup generator

Date of Transfer: July 3, 1961

ACCESS: West of Sawgrass Expressway at the end of Atlantic Avenue.

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level Remote digital headwater & tailwater recorders

Gate Position Recorder Remote digital recorder on both gates

Rain Gauge: Remote, digital recorder

Other: Remote digital recorder upstream (north) of S-38A and
downstream (south) of S-38C.

DEWATERING FACILITIES (per gate) 6" X 6" X 13' -5 stoplogs

Storage Fort Lauderdale Field Station